

Abstract of the Disclosure

An improved electrodeionization system for removing ions from liquids passed therethrough, comprising a flow-through electrodeionization module, and a power supply electrically connected to the electrodeionization module electrodes so as to establish a voltage gradient thereacross. The invention includes a monitoring device such as a resistivity sensor for monitoring the value of a property (e.g. resistivity) of the liquid output flow from the electrodeionization module, and a controller responsive to the monitoring device, for controlling the amount of time that the power supply is turned on, to maintain output quality within a predetermined range, while conserving power and simplifying power supply design.